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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,297	10/02/2001	Sean S. Chen	NSC-P05052	9656

7590 11/07/2003
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EXAMINER

CUNNINGHAM, TERRY D

ART UNIT PAPER NUMBER

2816

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/970,297

Applicant(s)

CHEN, SEAN S.

Examiner

Terry D. Cunningham

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-- Th MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-8,11-13,15-21 and 23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1-4,6-8,11-13,15-21 and 23 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Summary of changes in this action

1. Since claim 1 has been amended to recite the connection of the “pull-up device”, the New Matter rejection is hereby removed, since such is now attempting to refer to element 320. Applicant has now clarified that the recited “voltage pull-up device” is intending to refer to element 320. However, due to the new claim language, the issue is now being addressed as a rejection under the second paragraph of 35 U.S.C. § 112,

Specification

The amendment to the specification is hereby objected to because the amendment to the paragraph linking pages 13-14 now refer to a “reference circuit”. However, it is not clear what the “reference circuit” is referring to.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, there is no support found for the “voltage pull-up device” having the connections recited. As disclosed, the “voltage pull-up device” is part of the “band-gap reference circuit”, thus, it is not seen how it can be connected thereto. To overcome this, it is suggested that “circuit” in line 2, be changed to something such as --unit--. Note, similar correction would be required in line 5 and any corresponding occurrences in the dependent claims. This will clarify that the element recited in line 2 is part of the “band-gap reference circuit” of line 1, not the same thing.

Claims 2-4 and 6 are rejected for the reasons discussed above with claim 1.

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In claim 7, line 4, the phrase “low impedance” lacks relativity and is confusing.

Claims 8 and 11-13 are rejected for the reasons discussed above with claim 7.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-8, 11-13, 15-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadanka et al. (USPN 5,621,308) in view of newly cited art to Mietus (USPN 5,666,046). Kadanka et al. disclose, in Fig. 2, a circuit comprising: “a band-gap reference circuit (73)”; “a buffer circuit (54)”; and “a voltage pull-up device (70)”, wherein the “voltage pull-up device” has a “transistors (48)”. Kadanka et al. does not expressly disclose that transistor 46 has a “less than 1.0 V_{BE}”. However, it is notoriously well known, as expressly taught by Mietus (e.g., see Col. 1, lines 56-67), to use a voltage of 0.7 volts for the expected advantage of using a lower supply voltage (e.g., 0.8 volts). Therefore, it would have been obvious for one skilled in the art to manufacture transistor 48 with “less than 1.0 V_{BE}” for the expected advantage allowing for a lower supply voltage.

Examiner has fully considered Applicant’s remarks for the above rejection and has not found them to be persuasive. Applicant remarks that “the advantage of low impedance found in the claimed disposition is a result unexpected by Kadanka and Mietus”. However, Applicant provides no reasons to support this accusation. Examiner refutes this statement and contends that since the combination of Kadanka and Mietus providing a regulated output, it will

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necessarily have “low impedance”. Further, since the specification and claims fail to provide any specification definition for this phrase, “low impedance” would be given its broadest reasonable interpretation. Clearly, the combination of Kadanka and Mietus metes that broadest reasonable interpretation of “low impedance”.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

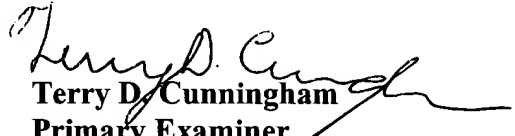
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC
November 5, 2003


Terry D. Cunningham
Primary Examiner
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